Carbon Cycle 2.0

Pioneering science for sustainable energy solutions

Carbon Cycle 2.0 LDRD Seminar Series

The Carbon Cycle 2.0 initiative is hosting a weekly seminar series given by recipients of Laboratory Directed Research and Development (LDRD) awards related to climate and energy. The seminars will take place most Thursdays at 2 pm in the new User Support Building large conference room (15-253) and are open to anyone interested in learning more about the wide variety of Carbon Cycle 2.0-themed research at Berkeley Lab.

Ion Beam Driven Fusion

Peter Seidl
Accelerator and Fusion Research, LBNL

WHEN: THURSDAY, APRIL 28, 2011, 2PM - 3PM
WHERE: User Support Building Conference Room 15-253

Inertial confinement fusion is the process of initiating nuclear fusion reactions by heating and compressing a fuel target with, for example, laser or ion beams. Applied to energy production, inertial fusion energy requires igniting fuel targets repeatedly, and using the released energy to generate electricity. We are exploring inertial fusion driven by energetic and intense heavy ion beams.

Advantages of heavy ion driven inertial fusion energy (IFE) include attractive reactor designs allowing liquid wall protection and credible final optic protection. Induction particle accelerators are very efficient, which lead to attractive economics. The main goal is the development of accelerator concepts and designs leading to an attractive development path with fewer scientific uncertainties.